UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,646	12/29/2003	Jasvantrai Shah	RIC99067	5723

25537 7590 08/15/2008

VERIZON
PATENT MANAGEMENT GROUP
1515 N. COURTHOUSE ROAD
SUITE 500
ARLINGTON, VA 22201-2909

EXAMINER	
WOLDEKIDAN, HIBRET ASNAKE	
ART UNIT	**PAPER NUMBER**
2613	

NOTIFICATION DATE	DELIVERY MODE
08/15/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patents@verizon.com

Office Action Summary	Application No.	Applicant(s)	
	10/747,646	SHAH, JASVANTRAI	
	Examiner	Art Unit	
	Hibret A. Woldekidan	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *29 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Examiner acknowledges receipt of Applicant's Amendments, remarks, arguments received on 07/08/08. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A Person shall be entitled to a patent unless-

> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

1. Claims 1-10 and 15-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Erickson et al (6,882,765).

Considering claim 1, Erickson discloses in a network including a router and an optical cross-connect system (OXC) **(See Col. 19 lines 1-6, fig. 17 i.e. a network comprising a router (1502) and OXC(1504))**, a method for responding to a failure **(See Col. 23 lines 1-5 and lines 28-41, fig. 17b i.e. a method of responding to a failure)**, the method comprising: detecting the failure in the router (**See Col. 22 lines 64-67, fig. 17b i.e. detecting a failure in the router(1502) by a port 1521A)**; sending a signal from the router to the OXC **(See Col. 23 lines 1-8, fig. 17b i.e. after the router(1502) detects a failure in one of the links(1702), the router(1502) sends a signal to the oxc(1504))**, where the signal indicates the failure **(See Col. 23 lines 1-8 and lines 28-41, fig. 17b i.e. sending failure indicating signal from the router(1502) to the oxc(1504))**; causing a working port of the OXC to connect to a protection port of the router in response to detection of the signal**(See Col. 23 lines 28-41, fig. 17b i.e. fig. 17 b illustrates that after the router(1502) detects a failure in one of the links(1702), the router(1502) sends a signal to the OXC(1504), as a result, the OXC working port(1541B) connects to the router protection port(1522))**; and transmitting data from the router to the OXC via the protection port**(See Col. 23 lines 34-41, fig. 17b i.e. fig. 17 the OXC working port(1541B) connects to the router protection port(1522) to transmit signal via the protection port).**

Considering claim 2 Erickson discloses the method of claim 1, where the sending further comprises: of sending an in-band signal to the OXC **(See abstract i.e. communicating in-band signal)**.

Considering claim 3 Erickson discloses the method of claim 2, where the sending an in-band signal to the OXC further comprises: sending a Synchronous Optical Network (SONET) signal to the OXC **(See abstract, Col. 20 lines 5-10 i.e. Communicating SONET channels with the OXC).**

Considering claim 4 Erickson discloses, the method of claim 1, where the sending further comprises: sending an out-of-band signal to the OXC **(See Abstract, Col. 14 line 1-6 i.e. OXC communicates using out-of-band signaling)**.

Considering claim 5 Erickson discloses, the method of claim 4, where the sending an out-of-band signal comprises: the step of addressing the out-of-band signal to an Internet Protocol address associated with the OXC **(See Col. 19 lines 1-9 i.e. internet protocol associated with OXC)**.

Considering claim 6 Erickson discloses, a method for responding to a failure in a network including a router and an optical cross-connect system (OXC) **(See Col. 23 lines 28-41 i.e. a method of responding to a failure in a network including a router and OXC)**, the method comprising: receiving a signal at the OXC from the router **(See Col. 23 lines 1-5 i.e. after the router(1502) detects a failure in one of the links(1702), the router(1502) sends a signal to the oxc(1504))**, the signal indicating a failure of a working port in the router **(See Col. 23 lines 1-5 and lines 28-30, fig. 17B i.e. a failure indication signal sent from the router(1502) to the oxc(1504))**; and connecting a protection port of the router to a working port of the OXC**(See Col. 23 lines 1-5 and lines 28-41, fig. 17b i.e. after the router(1502) detects a failure in one**

of the links(1702), the router(1502) sends a signal to the oxc(1504) As a result, the OXC working port(1541B) connects to the router(1502) protection port(1522)).

Considering claim 7 Erickson discloses the method of claim 6, where the receiving further comprises: receiving an in-band signal at the OXC **(See Col. 14 lines 12-16 i.e. communicating in-band signals at the OXC)**.

Considering claim 8 Erickson discloses the method of claim 7, where the receiving an in-band signal at the OXC comprises: receiving a Synchronous Optical Network (SONET) signal at the OXC **(See abstract, Col. 20 lines 5-10 i.e. Communicating SONET channels with the OXC)**.

Considering claim 9 Erickson discloses the method of claim 6, where the receiving further comprises: receiving an out-of-band signal at the OXC **(See Abstract, Col. 14 line 1-6 i.e. OXC communicates using out-of-band signaling)**.

Considering claim 10 Erickson discloses, the method of claim 9, where the receiving an out-of-band signal further comprises: addressing the out-of-band signal to an Internet Protocol address associated with the OXC **(See Col. 19 line 1-9 i.e. internet protocol associated with OXC)**.

Considering claim 15, Erickson discloses a communications network for transmitting data **(See fig. 7 i.e. optical network for transmitting data)**, the communication network comprising: a router for receiving the data from a terminal **(See Col 19 lines 1-7 a router for receiving a data from other units)**, the router comprising: a working port for receiving the data from the terminal **(See Col. 19 lines 5-6, Col. 20 lines 22-26, fig. 17B i.e. working port(1521) in the router(1502))**; and a

protection port for receiving the data from the terminal in response to a failure of the working unit or path**(See fig. 17b, Col. 23 lines 34-40 i.e. protection port(1522) for receiving the data in response to a failure in the working unit or path(1702))**; and an optical cross-connect system (OXC) for receiving the data from the router **(See Col. 19 lines 1-7, fig. 15 elements 1504 i.e. OXC for receiving data from the router)**, the optical cross-connect system comprising a working port **(See fig. 17B i.e. OXC comprising working port(1541B))**, where the working port of the OXC is connected to the protection port of the router in response to a signal received from the router indicating the failure of the working port of the router **(See Col. 23 lines 28-41, fig. 17b i.e. fig. 17 b illustrates that after the router(1502) detects a failure in one of the links(1702), the router(1502) sends a signal to the OXC(1504), as a result, the OXC working port(1541B) connects to the router protection port(1522))**.

Considering Claim 16 Erickson discloses the communications network of claim 15, where the router transmits a signal indicating the failure to the OXC, the signal causing the OXC to connect the protection port to the working port of the OXC **(See Col. 23 line 6-27, fig. 15 i.e. router transmit signal incase of a failure)**.

Considering claim 17 Erickson disclose, the communications network of claim 16, where the signal is an in-band signal **(See abstract i.e. in-band signal)**

Considering claim 18 Erickson disclose, the communications network of claim 17, where the in-band signal is a Synchronous Optical Network (SONET) signal **(See Col. 20 lines 5-10 i.e. SONET channels)**

Considering claim 19 Erickson discloses the communications network of claim 16, where the signal is an out-of-band signal **(See Abstract, Col. 2 lines 63-67 and Col. 3 lines 1-3, Col. 16 i.e. an out-of-band signal)**.

Considering claim 20 Erickson discloses, the communications network of claim 19, where the out-of-band signal is addressed to an Internet Protocol address associated with the OXC **(See Col. 19 lines 1-9 i.e. internet protocol associated with OXC)**.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu et al (US 2002/0063916) in view of Pan (7,274,869)

Considering claim 11, Chiu discloses an optical cross-connect system **(See fig. 3 i.e. fig. 3 illustrates that an OXC(OXC_B) connecting with a working router(100_{B1}) and a protection router(100_{B2}). Since the OXC connected with the working router and a spare router, the OXC has a protection port and a working port)** comprising: a spare port for transmitting data from a router **(See Paragraph 47,45, fig. 3,6 i.e. fig. 3 illustrates that an OXC(OXC_B) communicating with a working router(100_{B1}) and a redundant router(100_{B2}) showing the OXC(OXC_B) has a protection port for**

replacing a failed working router(100_{B1}) with a protection router(100_{B2})); and a working port for transmitting data from a primary router **(See Paragraph 38,47,45, fig. 3,6 i.e. fig. 3 illustrates that an OXC(OXC_B) communicating with a working router(100_{B1}) for transmitting data from a router)**, where the working port is connected to the router in response to a failure of the primary router**(See Paragraph 47, fig. 3,6 i.e. fig. 3 illustrates that the OXC(OXC_B) for communicating with a redundant or protection router(100_{B2}) incase of a failure with a working router(100_{B1}))**.

Chiu does not specifically disclose transmitting a low priority data using a spare port and transmitting a high priority data using a working port.

Pan teaches transmitting low priority data using a spare port and transmitting high priority data using a working port **(See Col. 15 lines 4-8 and lines 24-27 i.e. primary path for high priority data and alternative or spare path for non priority data)**.

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Chiu, and transmit a low priority data using a spare port and a high priority data using a working port, as taught by Pan, thus providing an efficient data transmission system by prioritizing data, as discussed by Pan **(Col. 2 lines 32-35 and Col. 3 lines 38-41)**.

3. Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chiu et al (US 2002/0063916) in view of Pan (7,274,869) further in view of Erickson et al (6,882,765).

Considering claim 12, Chiu and Pan disclose the optical cross-connection system of claim 11, where the working port is connected to the router in response to receiving a signal from the router **(See Paragraph 17,45, fig. 3,6 i.e. fig. 3 illustrates that an OXC(OXC_B) communicating with a working router(100_{B1}) for transmitting data from the router)**.

Chiu and Pan do not specifically disclose OXC working port is connected to the router in response to receiving an in-band signal from the router.

Erickson teaches the working port is connected to the router in response to receiving an in-band signal from the router. **(See abstract, Col. 23 line 17-27, fig. 17B i.e. in-band signaling between the working port of the OXC and router)**.

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Chiu and Pan, and OXC working port to be connected to the router in response to receiving an in-band signal from the router, as taught by Erickson, thus allowing a means of minimizing the time to customer service interruption during switching from the failed port to the protection port by having both ports in the same unit, as discussed by Erickson **(Col. 2 line 63-Col. 3 line 1)**.

Considering claim 13, Chiu and Pan do not specifically disclose the optical cross connection system of claim 12, where the working port is connected to the router in response to receiving a Synchronous Optical Network (SONET) signal from the router

Erickson teaches the optical cross connection system of claim 12, where the working port is connected to the router in response to receiving a Synchronous Optical

Network (SONET) signal from the router **(See Col. 19 lines 1-7, Col. 23 line 6-27, fig. 15 i.e. working port is connected to a router in case of a failure in primary path)**.

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Chiu and Pan, and the OXC working port to be connected to the router in response to receiving a Synchronous Optical Network (SONET) signal from the router for the reason discussed in claim 12

Considering claim 14, Chiu and Pan do not specifically disclose the optical cross-connection system of claim 11, where the working port is connected to the router in response to receiving an out-of-band signal from the router.

Erickson teaches the optical cross-connection system of claim 11, where the working port is connected to the router in response to receiving an out-of-band signal from the router **(See Col. 2 lines 63-67 and Col. 3 lines 1-3, Col. 16 lines 28-46 i.e. working port is connected to a router in response to an out of bound signal)**.

It would have been obvious to one skilled in the art at the time the invention was made to modify the invention of Chiu and Pan, and the working port is connected to the router in response to receiving an out-of-band signal from the router for the reason discussed in claim 12.

Conclusions

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hibret A. Woldekidan whose telephone number is (571)270-5145. The examiner can normally be reached on 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Vanderpuye can be reached on 5712723078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/H. A. W./
Examiner, Art Unit 2613

/Kenneth N Vanderpuye/
Supervisory Patent Examiner, Art Unit 2613